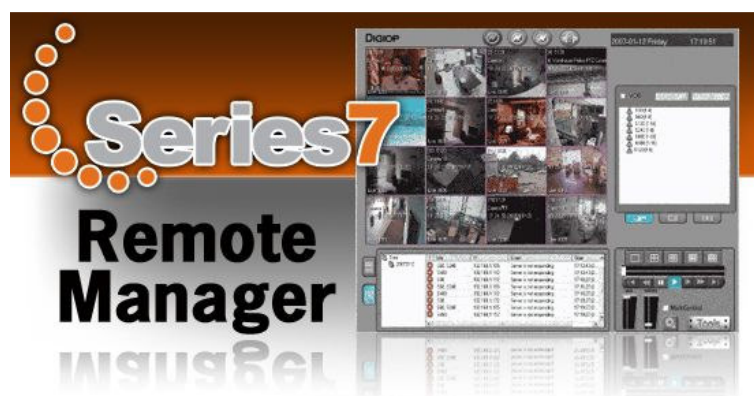




Simplifying the World of Surveillance

2007

Remote Manager User Manual



Revision 1.0

Table of Contents

Dear Customer	4
Remote Manager Version 7.2.1.0718 Minimum Requirements	5
Installation of DIGIOP Remote Manager	6
Remote Manager Screen	8
Connect Button	9
Live Remote Connection	11
Remote Playback	12
Print Image	13
Back-up Image	14
Remote Backup	15
Import Backup Video	17
Image Post Processing	18
Image enhancement option buttons	19
Recorded and Preview Images	20
User-Defined Enhancement Settings	21
Image Post Processing Save, Print, Copy	21
View Search Process (during SmartSearch)	23
Sensitivity (for SmartSearch)	24
SmartSearch - Search	24
Quick Search	24
Start the SmartSearch Process	25
Search Next Movement	25
Stop Search	25
SmartSearch Result Event List	25
Zoom (for playback only)	26



Dear Customer

Thank you for trusting DIGIOP Technologies with providing your Digital Video Solution. More than 50 billion times a day, DIGIOP surveillance management systems reliably capture, serve, and protect images, audio, and data for some of the most critical and respected organizations around the world, and You are one of them.

DIGIOP Remote Manager is a command and control software application designed for use with enterprise, remote and network applications. Remote manager allows users to remotely access, search, browse, display and transfer stored video/image files to a remotely connected workstation(s). Additionally, users may simultaneously view, search and archive up to 24 video channels, control access through administrative and user level password assignments, remotely configure DVR and individual camera settings and receive notification of events such as alarm, motion detection and video loss.

- Command & Control Software Solution for Enterprise, Remote and Network Applications
- Remotely View, Search & Archive up to 24 Channels
- Integrated Web Browser Provides Easy to Use Interface for Search & Retrieval
- Triplex Functionality allows Users the Ability to View Live, Search Recorded Data and Back-up Video/Image Files Simultaneously
- Remotely Configure DVR and Individual Camera Settings
- Control Access via Administrative and User Level Passwords
- Receive Remote Notification of Events Including Alarm, Motion and Video Loss
- Smart Search Functionality Allows Retrieval of Specific Information Contained Within Video Frames

Minimum Requirements

Remote Manager Version 7.2.1.0718 Minimum Requirements

The minimum requirements to run this software are:

S-Class

CPU: 2.0GHz+ (Celeron/P4/AMD)

Memory: 512MB

Video Memory: 32MB+ (1024 x 768 32 Bit)

Support Direct Draw and GDI Direct X 8.1+

Disk Space: 300MB+

LAN: 10/100/1000 Network

OS: Windows 2000 w/SP4 or XP Home or Pro w/SP2

H-Class

CPU: 3.0GHz+ (Celeron/P4/AMD)

Memory: 1024MB

Video Memory: 128MB+ (1024 x 768 32 Bit)

Support Direct Draw and GDI Direct X 9.0+

Disk Space: 300MB+

LAN: 10/100/1000 Network

OS: Windows 2000 w/SP4 or XP Home or Pro w/SP2

**** Results May Vary If Using Nvidia Riva TNT2 & SiS Video Chipsets.**

Compatible Server Software: DIGIOP Server Version 7.2.0.0601 or DIGIOP Server Version 6.11

Installation of DIGIOP Remote Manager

1. The following screens appear when DIGIOP Remote Manager installation CD is inserted. If the screens don't appear automatically, open disk1 folder from the supplied CD and run Setup.exe. Follow the program installation instructions as shown on the screen.



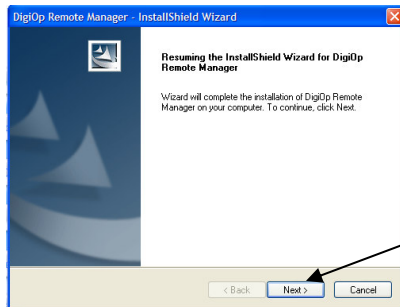
When you insert the disc supplied with Your DIGIOP the screen to the left will be displayed. To install Remote Manager

Click on the Remote Manager icon



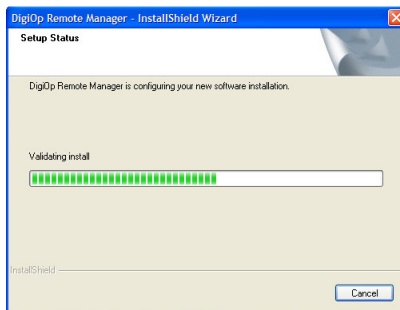
This screen will come up

Click on Install

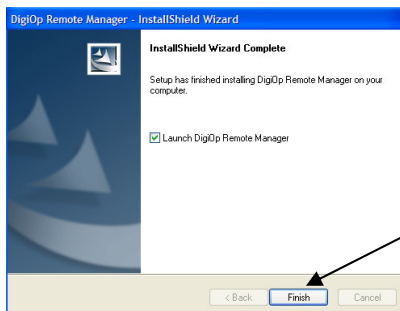


DIGIOP Remote Manager Wizard will come up, to continue installing the software

Click Next

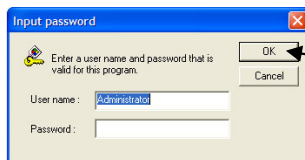


The Install Wizard will Install the software



The Install Wizard complete box will come up

Click Finish



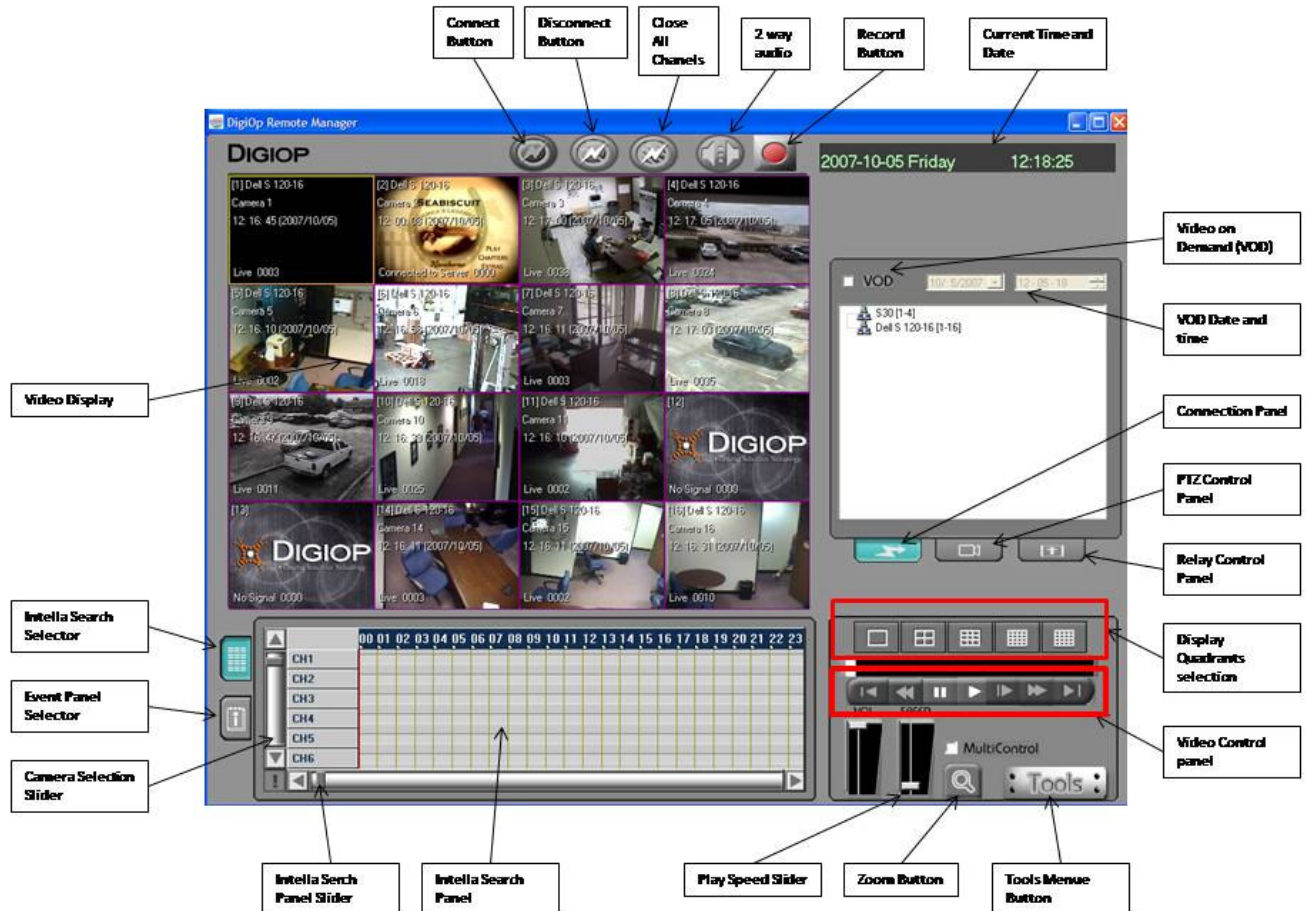
When the software Wizard has completed the installation The Remote Manager Login will appear. A Password has not been defined at this time. Leave Password Blank and

Click OK

The Remote Manager Screen will come up

Note: The user functions within Remote Manager are on a client based relationship meaning that the rights you assign to the user will ONLY be applicable to that user on that workstation only.

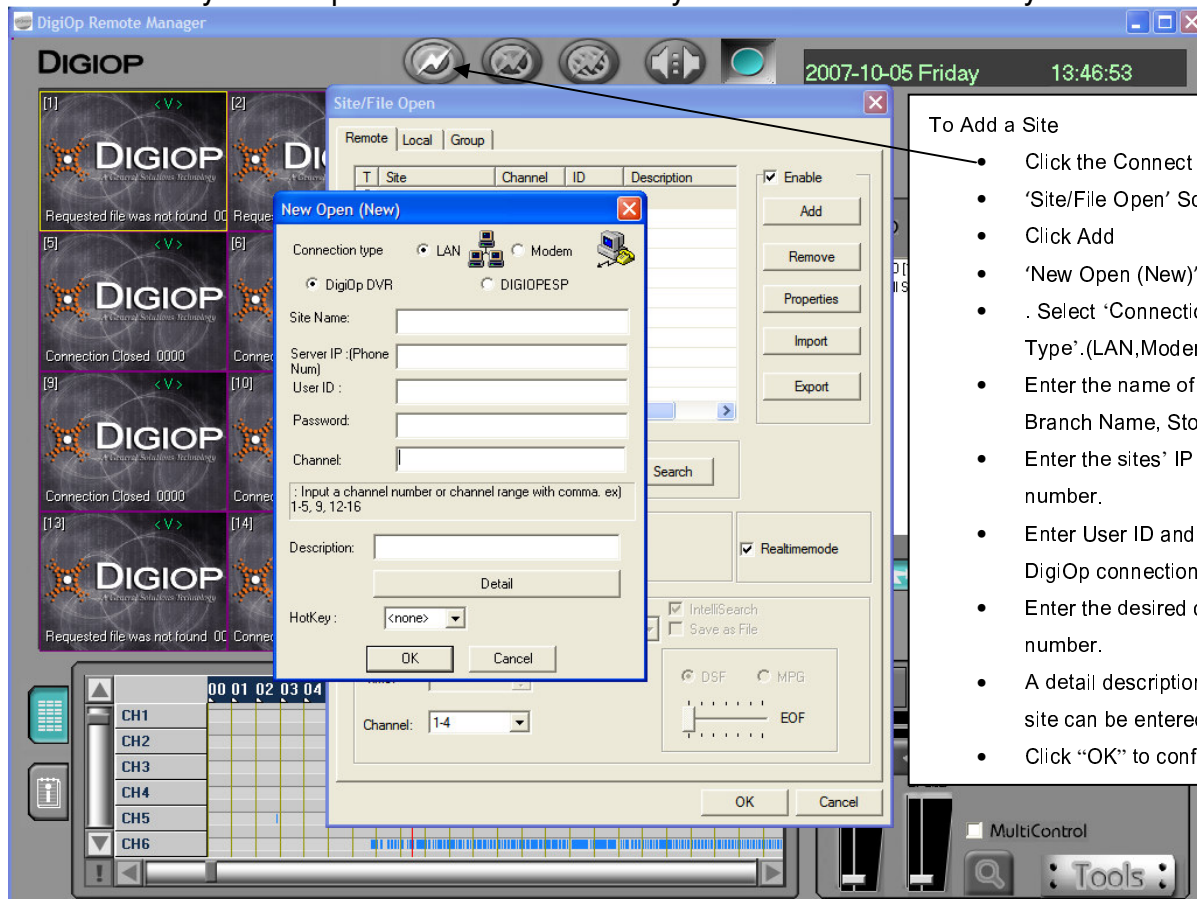
Remote Manager Screen



The Function of Each Button is for the most part self explanatory. In the following pages the functionality of each part of the software will be explained in detail.

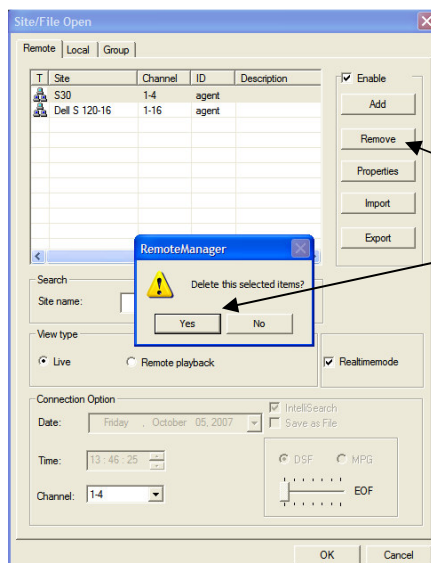
Connect Button

This is where you set up the DIGIOP units that you want to view remotely.

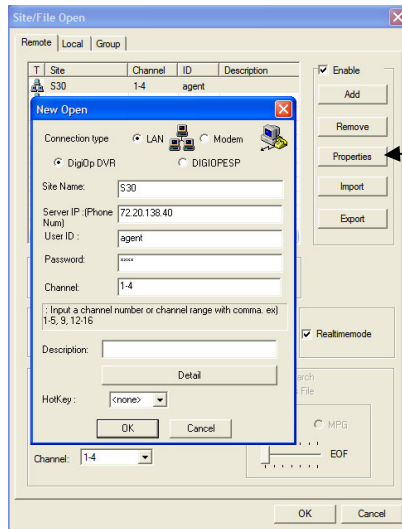


To Add a Site

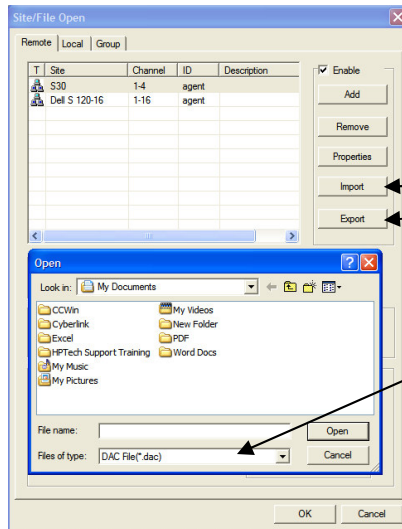
- Click the Connect Button
- 'Site/File Open' Screen comes up
- Click Add
- 'New Open (New)' Window Opens
- Select 'Connection Type'. (LAN, Modem)
- Enter the name of site (For Example: Branch Name, Store Number, etc.)
- Enter the sites' IP address or phone number.
- Enter User ID and Password for DigiOp connection.
- Enter the desired camera channel number.
- A detail description of the selected site can be entered on 'Description'.
- Click "OK" to confirm the entries



<Remove> A site can be deleted by selecting the desired site to be removed and clicking "Remove"
A Caution box will come up click Yes



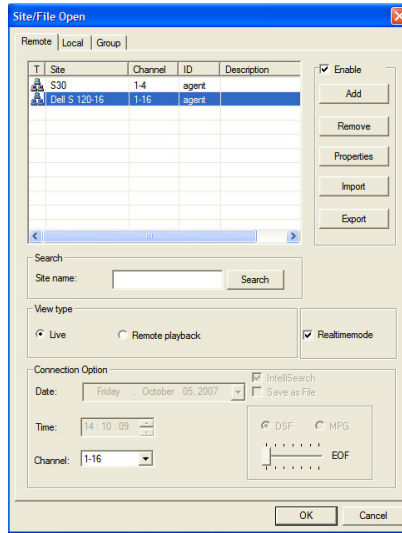
<Properties> Checks and modifies the entered user Information



<Export> <Import> Save site list, Adds site list in (If you have several remote agent stations to set up the same you can save the settings to a pin and import)

.DAC' file format

Live Remote Connection



Live Mode

- Select desired sites (Dell S 120-16) to connect to.
- Select 'Live' in "View Type".
- To view sites on channels other than those in the list, select the desired channel from the 'Channel' box in "Connection Option" at the bottom of the screen.
- Click "OK" to connect to the server.

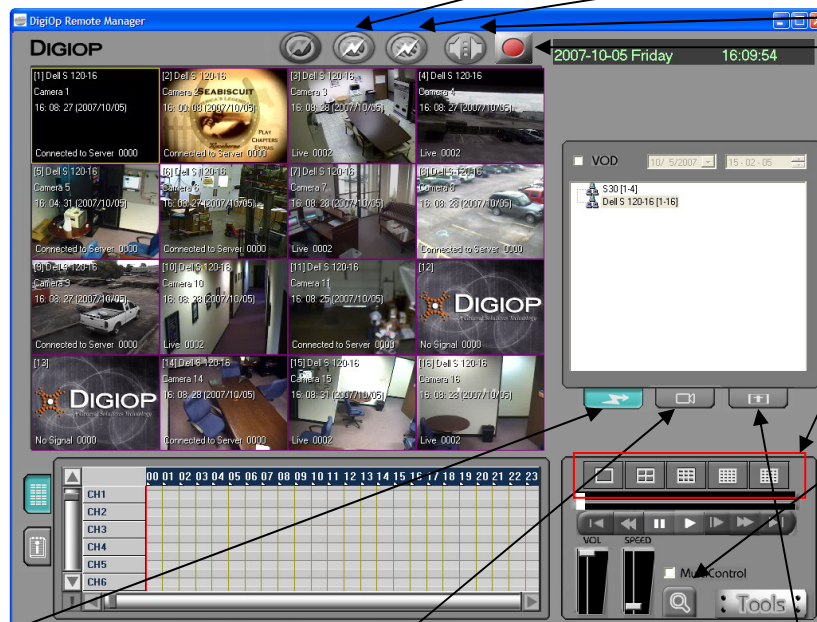
Multi-Site Connection

- To connect to multiple sites at the same time, select desired sites in the list and press "OK".
- The multiple sites can be selected at once by clicking on the sites while pressing down on <Ctrl> or <Shift> button.

* Simultaneous access to more than one site is available only through the LAN. The modem connection allows only single site access per connection.

Live Video Screen

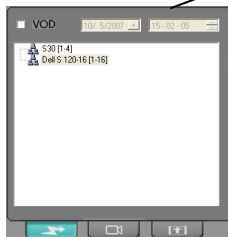
The live view screen, once connected, gives you the ability to Remotely View and control your DIGIOP. Most functions available on the DIGIOP Server are also active from the Remote Manager Software.



- Disconnect from single channel
- Disconnect All Channels
- Activate 2 way Audio
- Start Record to pre-specified drive

Screen Quadrant Selection (Click screen again to move to next camera or group of images)

Zoom Click the Zoom button and then click the video you want to Zoom in on



Connection Panel Provides a quick connect for live or recorded video drag and drop the recorder to the first screen for live video. Click VOD and select time and date then drag and drop recorder to first screen for recorded video

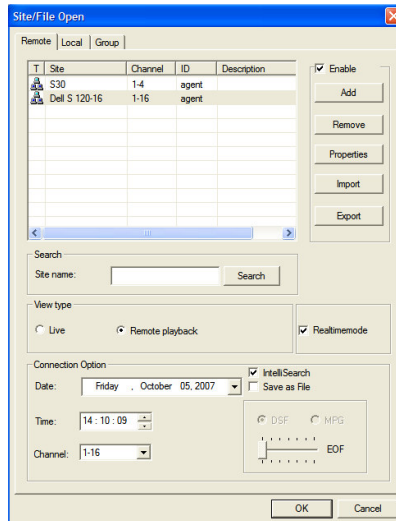


PTZ Camera Control gives you the ability to remotely control the Pan Tilt Zoom and Preset Functions of a PTZ Camera



Relay Panel Allows you to remotely activate Relays that are set up on the server

Remote Playback

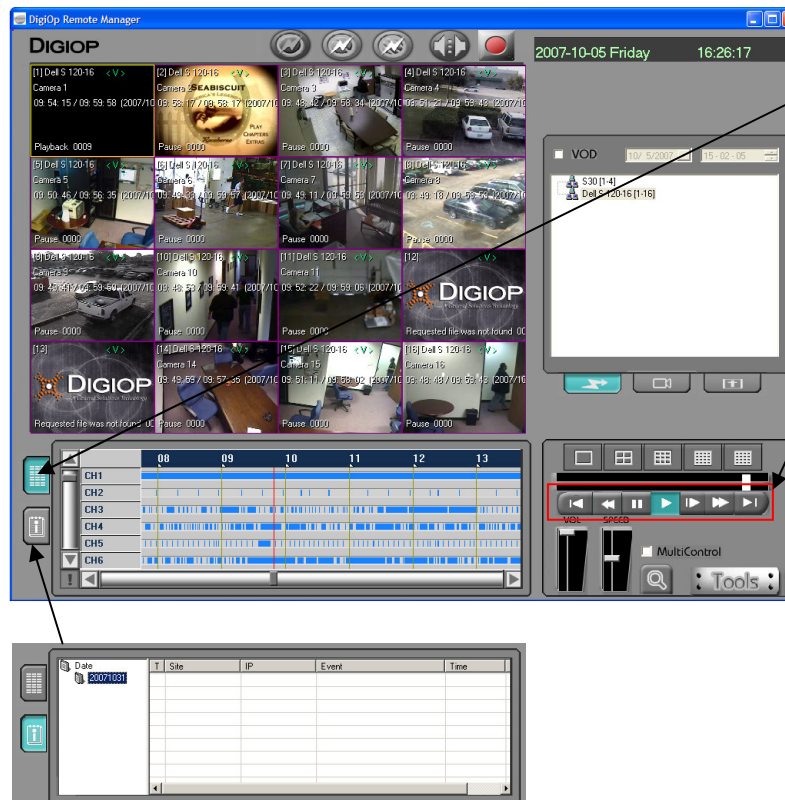


Remote Playback

- Select a site (DigiOpG2 DVR) that you want to connect to
- Select 'Remote Playback' in "Connection".
- Select desired date and time to search.
- To view sites on channels other than those in the list, select the desired channel from the 'Channel' box in "Connection Option" at the bottom of the screen.
- Click Intelli search for 24 hour or leave blank for 1 hour
- Click "OK" to connect to the server.

Remote Playback Screen

Remote Playback once connected gives you the ability to Remotely View and control your recorded video from your DIGIOP. Most functions available on the DIGIOP Server are also active from the Remote Manager Software.



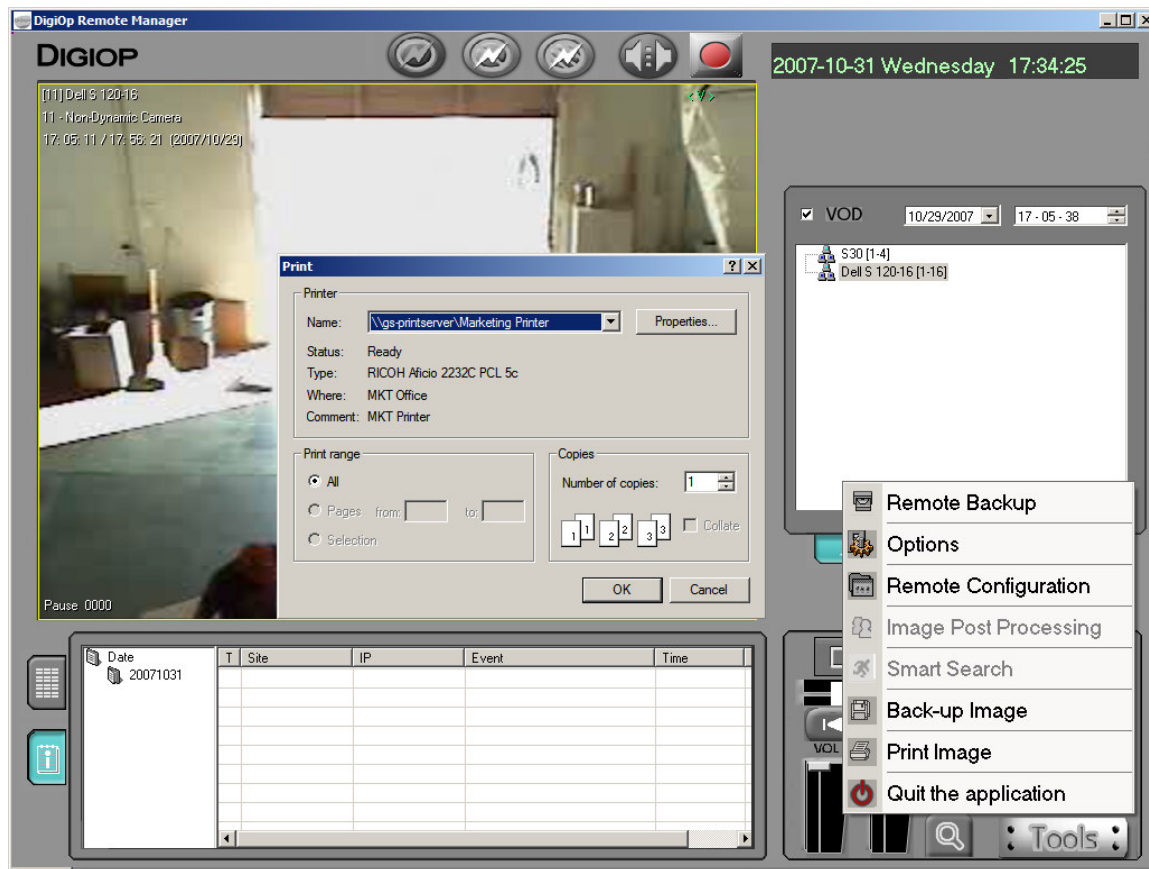
Remote Playback screen functions the same as live with more functionality.

Intella Search Panel gives you a graphic display of the video captured for the time period. The blue areas show the recorded video. Slide the red line to the time you want to view and push play

Video Control buttons are active on playback from left to right Go to start, fast backwards, pause, play, one frame forward, fast forward, go to end

The Event Panel displays incoming events from DIGIOP DVR's

Print Image



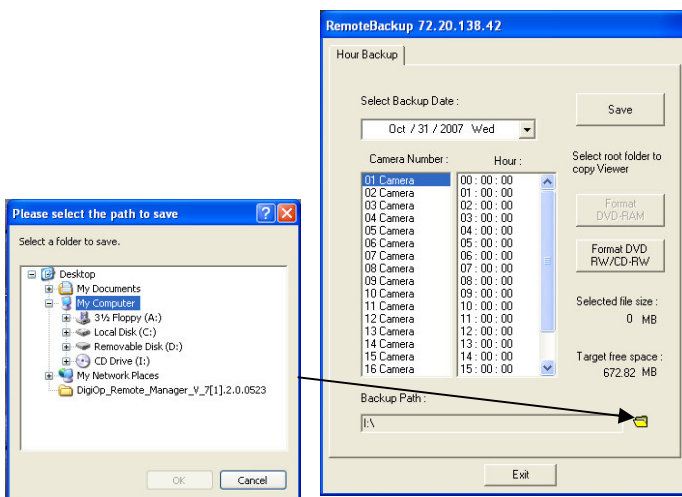
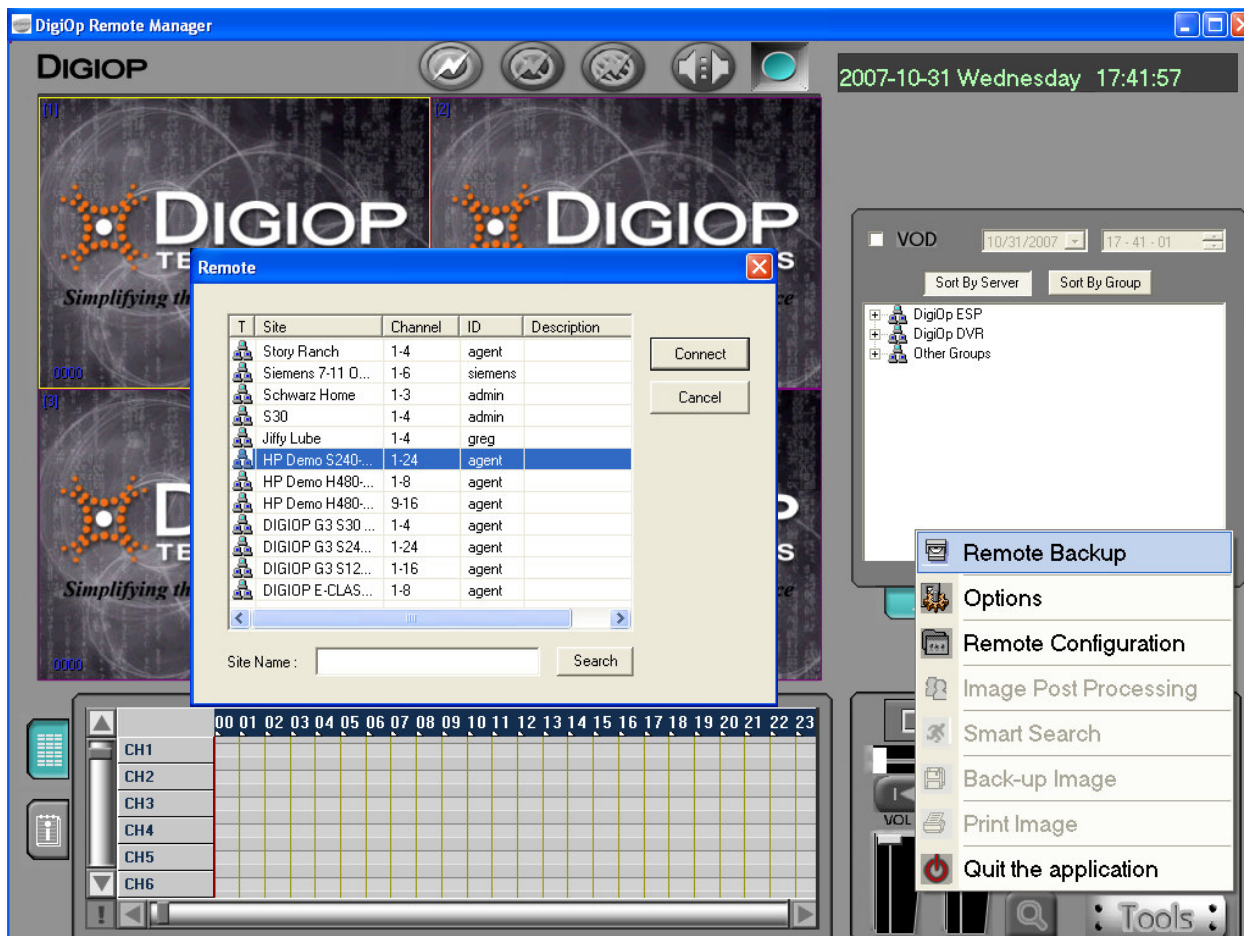
When in Remote Playback you can print an image by pausing recording and using the Tools menu choose Print Image. A print screen will come up, choose the desired printer and click OK

The screenshot displays the DigiOp Remote Manager application window. At the top left, the title bar reads "DigiOp Remote Manager". Below it, a status bar shows "[11] Dell S 120-16 [1-16]" and "17:05:11 / 2007-10-31". The main area features a large video feed of a room with a person sitting at a desk. Overlaid on the top left of the video is a "Save As" dialog box. The dialog's "Save in:" field points to "My Documents". It lists several folders: CCWin, Cyberlink, Excel, HP Tech Support Training, My Music, My Pictures, My Shapes, My Videos, New Folder, PDF, Remote Manager Screens, Training, Updater 5, and Word Docs. The "File name:" field contains "20071029170511", and the "Save as type:" dropdown is set to "JPEG File (*.jpg)". Buttons for "Save" and "Cancel" are visible. On the right side, there's a panel titled "2007-10-31 Wednesday 17:37:09" which includes a "VOD" checkbox, a date/time selector set to "10/29/2007 17:05:38", and a list of items like "S30 [1-4]" and "Dell S 120-16 [1-16]". A context menu is open over this panel, listing options such as "Remote Backup", "Options", "Remote Configuration", "Image Post Processing", "Smart Search", "Back-up Image", "Print Image", and "Quit the application". At the bottom left, there's a "Date" panel showing "20071031" and a table with columns for "T", "Site", "IP", "Event", and "Time". The table is currently empty. On the far right, a vertical toolbar contains icons for various functions, including a magnifying glass labeled "Tools".

14

Remote Backup

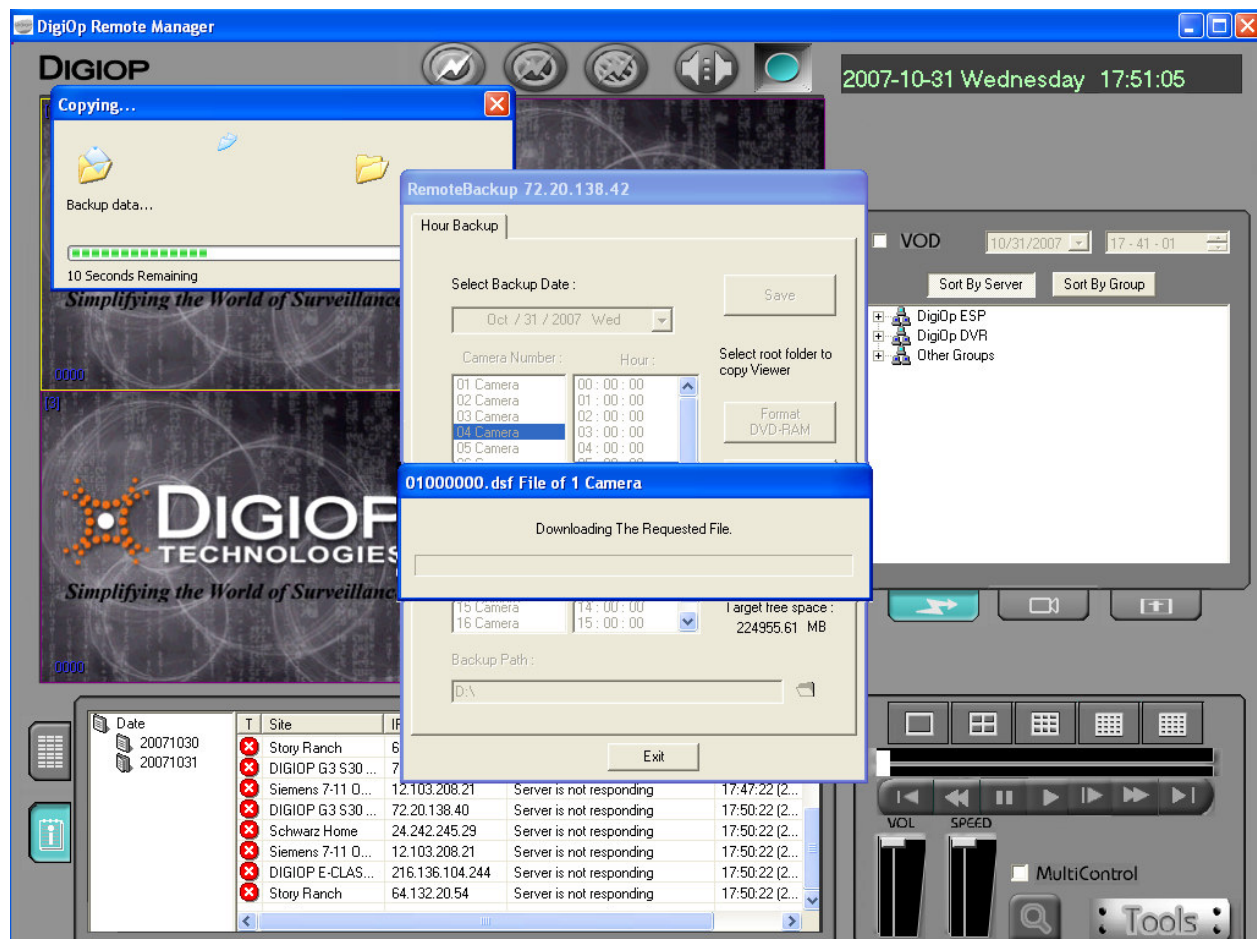
To save video clips remotely Click Tools> Remote Backup. The remote screen will come up. Choose the DIGIOP that you want to back up video on and click Connect



This screen will come up. Choose the desired camera you want to backup and to the right an hourly display will populate. Using Backup Path: Choose the media you want to backup to. Choose the time frame that you want to backup

*note the file size and ensure it will fit on the media

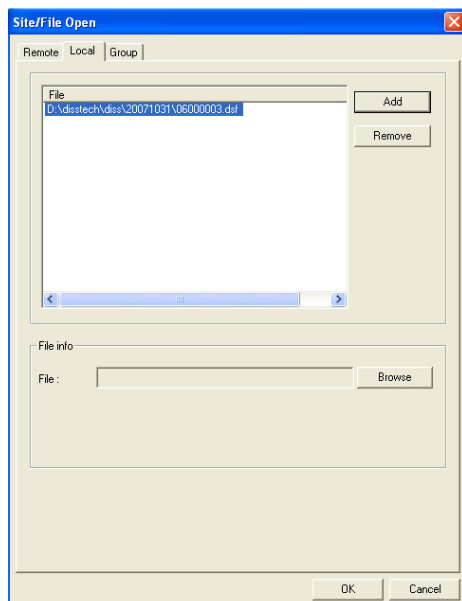
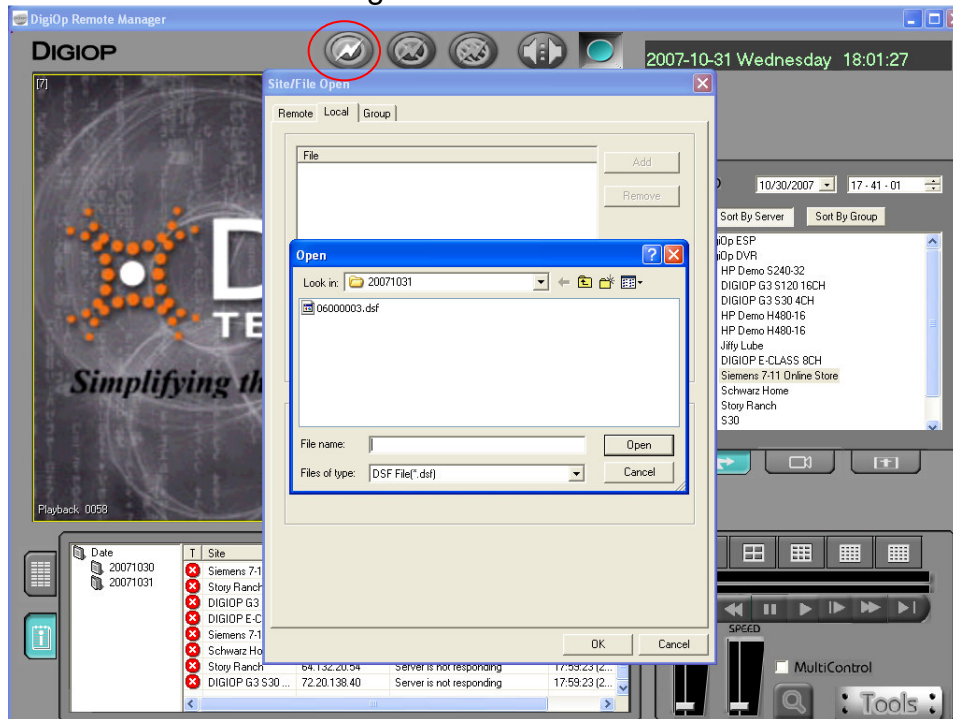
Click Save



Remote Manager will proceed to write the file to the media

Import Backup Video

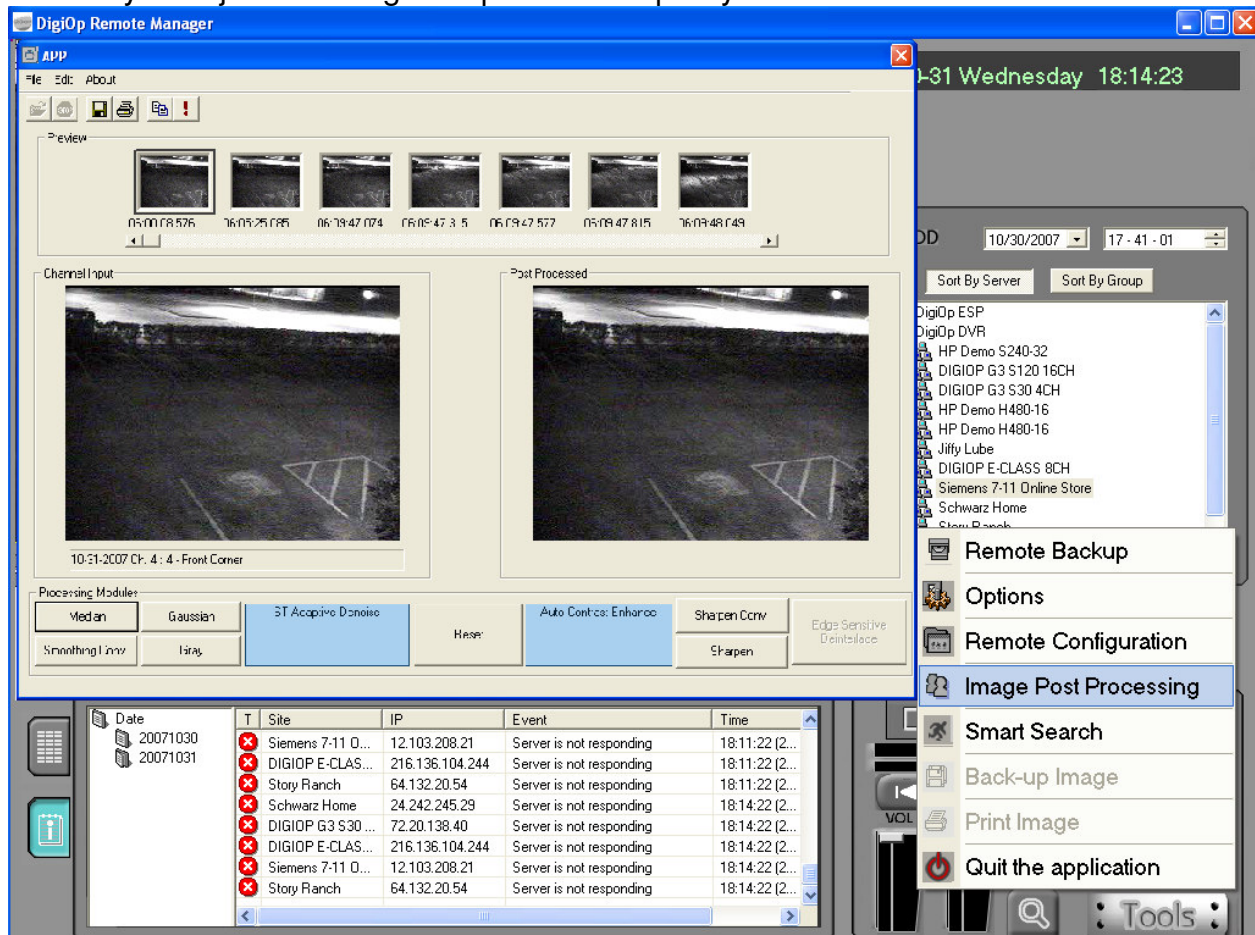
To view the video that has been exported Click the Connect button. The Site/File Open folder will come up. Choose the Local Tab and click Browse. Find the file that has been backed up and click Open. This will populate the file info block Click Add this will apply the video to remote manager



When you click OK the video will play

Image Post Processing

Once you have backed up your video and imported it into Remote Manager you have the ability to adjust the image to optimize the quality



To do this:

- Using the graphical time line on the upper part of the screen, select the approximate time of the images (not critical as the Image Post Editor will display images for the entire file)
- Click the TOOLS menu button
- Select the IMAGE POST PROCESSING option. The Image Processor window will open.



The Preview panel will enable you to scan images for the entire hour's recording, assuming there is an hour of recording. If the camera was set for Motion Detect, there may be less than a full hour of video.

At the left most end, the Preview slider  will identify the time (HH:MM:SS:1/1000 ref) that the camera started recording in the selected hour.

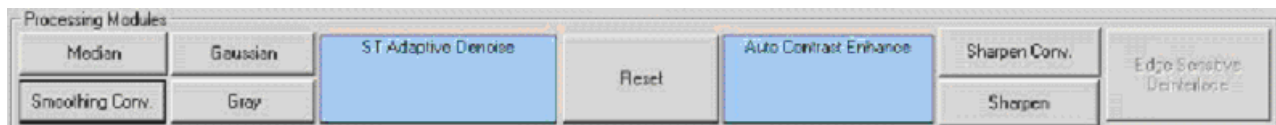


The first images are displayed, frame by frame across the Preview panel.

Each thumbnail preview is captioned with the time and 1/1000 frame reference number.

Moving the slider will scan through the full hour of images in increments defined by the 1/1000 reference.

Image enhancement option buttons



These enhancement tool buttons are typical of most video enhancement editors.

Enhancements are:

- Median
- Smooth conv.
- Gaussian
- Gray
- ST Adaptive Denoise
- Reset
- Auto Contrast Enhance
- Sharpen Conv.
- Sharpen
- Edge Sensitivity De-interlace

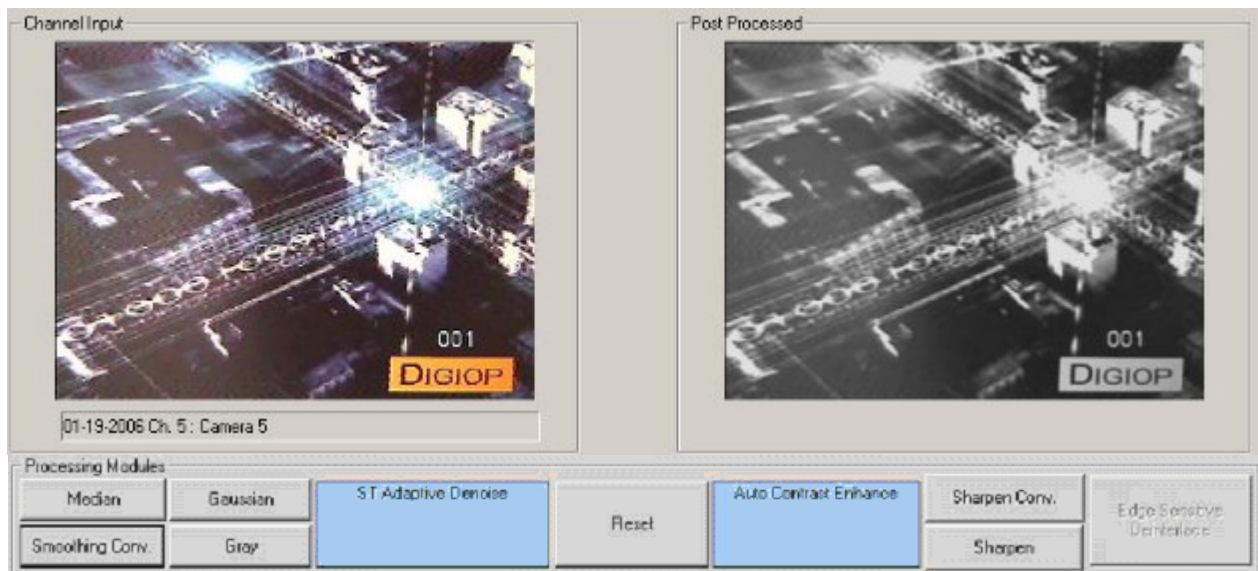
Recorded and Preview Images

There are two images:

- “Channel Input” i.e. the original file image from the HDD file
- Post Processed is the Channel Input with the real-time enhancement changes

Note: To reset or restore the Post Process image to match the Channel Input image, click RESET.

Click the buttons below these images to enhance the images.



The enhancement buttons provide 'stepped' enhancements.

User-Defined Enhancement Settings

To edit the image using finer or course settings;

- Click the EDIT menu at the top of the screen
- Click FILTER OPTION
- The Options tabs will appear
- Use the slider controls to adjust the image settings
- Click DEFAULT to reset the sliders
- Press OK to apply the changes

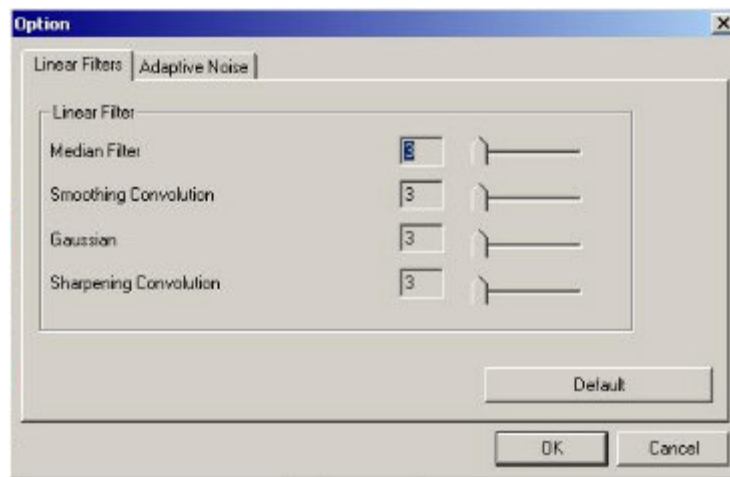
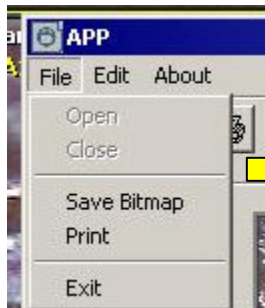
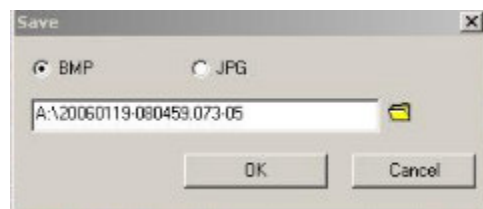


Image Post Processing Save, Print, Copy



To save or print images after post-processing, use the FILE menu. Images can be saved in either BMP or JPG format.



To copy an image to the clipboard use the EDIT menu or the COPY toolbar button.

Once you have backed up your video and imported it into Remote Manager you have the ability to run a smart search of the video

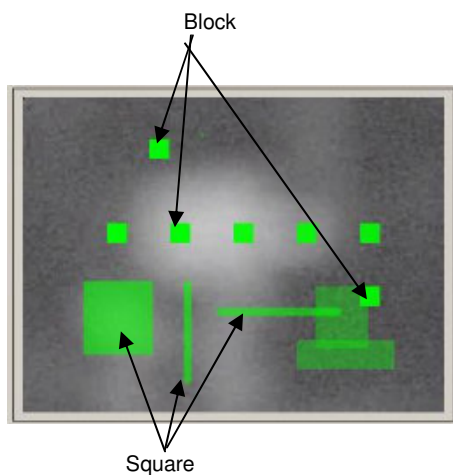
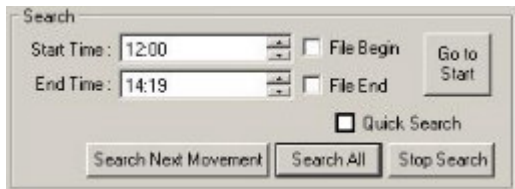


“Motion sensitive regions” are created by the Operator on a recorded camera image selected from the available recorded files. The image is viewed on the screen to which the motion sensitive areas can be drawn directly onto the image. Any activity that compromises these regions (sensitivity level adjustment) will create an ‘event’ reference in the right associated list.

22

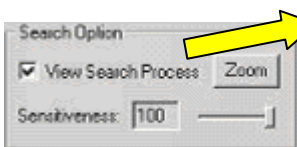
Procedure:

1. On the main search screen, select the date/time to start the search at.
2. Select the camera to be analysed by clicking on the image (border will highlight)
3. Select the SMARTSEARCH option from the Search>TOOLS menu.
4. The above window appears which confirms the camera and the date and time of the search.



5. In the SEARCH options, enter the start and end times for the search. You can use the File Begin and File End checkboxes to set the start and end times to match the available file content.
 6. Click the "Go to start" button to view the start point selected.
 7. There are two available options for defining search regions:
 - a. "Block" creates a fixed-size square on the image. Up to 20 horizontal and 15 vertical blocks can be added to the image by simply clicking on the image in the desired location.
 - b. "Square" creates a User-defined rectangle. Simply click on the image, then drag the mouse to define a "square" region.
- Multiple squares and rectangles can be created on a single image to create the motion sensitive regions required. Blocks and squares can overlap.
8. Select the MOVE option to click on a Block or a Square and move it to a new location.
 9. Select the DELETE option to click on a Block or Square and remove it.

View Search Process (during SmartSearch)



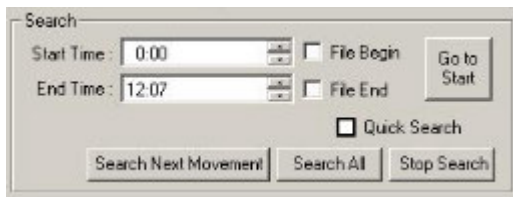
☒ View Search Process Check the "View Search Process" check box to view all video. When this option is unchecked, only the images that compromise the defined movement sensitive Squares or Blocks at the sensitivity level selected are previewed. If no event is found, the image will not change.

Sensitivity (for SmartSearch)

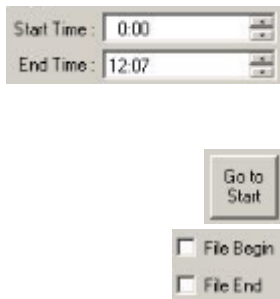


The sensitivity slider can be adjusted between zero (**not** sensitive to movement) and 100% (**very** sensitive to any changes in the defined regions). Set this value depending on the amount of movement you wish to be detected before an event is triggered. The number of events appearing on the event log will reflect the sensitivity of the regions i.e. 100% sensitivity will return more events.

SmartSearch - Search

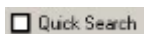


By default the System will open with the START TIME as the beginning time of the first recording for that camera, that day (initially the same as “File Begin” time). The END TIME is the time of the end of the file (initially the same as “File End”) when the SMARTSEARCH menu was opened (i.e. does not update real time).



- These two times can be adjusted to a more defined period by using the up/down arrow buttons, or directly editing the numeric in the boxes.
- Click the “Go to Start” button to see the image at the start of the selected period.
- To ignore the defined START TIME and/or END TIME and redefine to the file beginning and/or file end, check the FILE BEGIN and/or FILE END check boxes. The appropriate START or END text box will grey out indicating the override selection.

Quick Search



The Quick Search feature simply speeds up the process. During casual testing a 10 minute recording processed 20% faster with Quick Search selected. Search times are typically 60 seconds per 10 minutes of video. In effect the Quick Search ONLY reviews the “index” images and ignores the other images. In a relatively motionless scene this option could save considerable search time. If the Quick Search option not selected, DIGIOP will review every image recorded.

Start the SmartSearch Process



Search Next Movement

Click the “Search Next Movement” button to start the search. The search will pause at the first event (i.e. movement detected inside a defined sensitive region). The found event appears on the list with the start and stop time of the event. Click again to move to the next search.

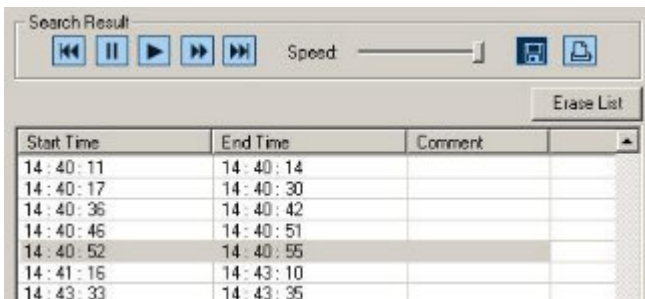
Search All

The “Search All” button will erase the current search event list and start the search from the beginning again. The search can be stopped but not paused. Events will be listed by start/end times.






Stop Search

The “Stop Search” button terminates the search completely (no pause option is available).

SmartSearch Result Event List

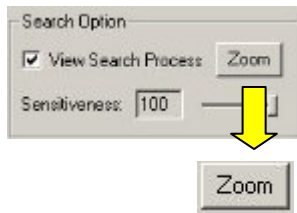


Once the SmartSearch is complete, events can be highlighted in the list and reviewed using the controls above the list:

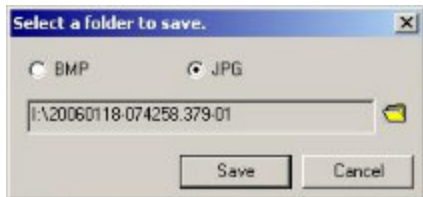
-  Go to beginning of file
-  Pause playback
-  Playback
-  Fast Forward
-  Go to end of file


The **Speed** slider control only impacts the playback. The playback speed varies depending on the fps the recording was recorded at. At the lowest setting the video will playback at about 1fps.

Zoom (for playback only)



Choose a record, click the Zoom button, then **use the mouse scroll wheel to zoom** into the part of the image of most interest (e.g. a square or block region). Press the Play button and the video will playback at that zoom magnification. At the end of the playback, or when a different video record is selected from the SmartSearch list, the zoom magnification will be retained until the zoom button is clicked again and the mouse wheel is used to readjust the image. To disable zoom click the “Go to start” button.



 The SAVE button will bring up a folder browser.

Select the destination folder and choose OK.

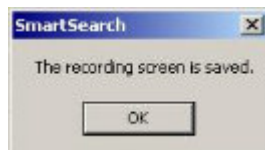
A folder and file will be created as either BMP or JPG with a name:

Folder and file: 20060118-071746.079-01

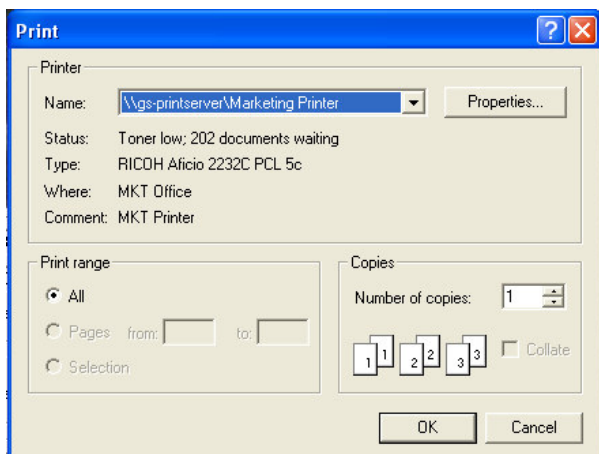
The name format is:


YYYYMMDD – HHMMSS.RRR – Cam#


(where RRR is a 1/1000 sec reference number)



Once saved, the System will display a confirmation message.



 The **Print** button will print the first image of the search event.

 The **ERASE** button will erase the list and is the same as pressing SEARCH ALL (see above)